VII. Further Observations upon the Treatment of Surgical Tuberculosis by Congestive Hyperæmia. By Dr. BIER (Kiel).

- (1) A large percentage of joint tuberculoses heal smoothly under the treatment of congestive hyperæmia.
- (2) In other cases difficulties arise in the treatment, and the disease becomes worse. The latter is usually only apparent, and is due to,—
- (a) Tuberculous abscesses in closed and open lesions. They can be cured by puncture and the injection of iodoform-glycerin emulsion, and are no indication for resection. The abscesses usually are accompanied with symptoms of severe inflammation and disturbance of the function of the limb. They form rapidly, and must be diagnosed and treated as soon as possible. Sometimes they occur without symptoms, and therefore examinations should be frequently made.
- (b) Hyperæmic ulcerations and granulation formation. The first heal when the congestion is relieved for a time, and the limb is elevated, kept quiet and clean. The latter finally contract under the continuation of the hyperæmia.

These are the apparent set-backs. The following are real changes for the worse:

- (c) Acute inflammations complicating the tuberculosis and giving rise to "hot abscesses." They must be incised. The acute suppurative process may involve the whole joint cavity. When this occurs the joint must be resected. Erysipelas may develop. The hyperæmia should be discontinued and the disease treated as usual.
- (3) The quickest results are obtained by a combination of congestive hyperæmia and iodoform injection. At the same time the joint should be immobilized.
- (4) When, after the tuberculosis has greatly improved, fistulæ still remain, they should be treated in the following manner:
- (a) Iodoform-glycerin should be injected in the tissue about the fistula.

- (b) The congestive hyperæmia should be discontinued, and the fistulæ injected with corrosive solutions,—preferably with cupr. sulph., zinc. sulph., āā 10.0; aqu. destillat., 120.0.
 - (c) Sequestra should be operatively removed.
- (5) The presence of large abscesses is a contraindication to the congestive treatment.
- (6) Good results are obtained by congestive hypertrophy in cases of tuberculosis of the testicle and in tuberculous tendo-synovitis.
- (7) This treatment is also applicable to chronic articular rheumatism, arthritis deformans, sequelæ of acute articular rheumatism, and of gonorrhœal arthritis.—Verhandlungen der deutschen Gesellschaft für Chirurgie, XXIII Kongress, 1894.
- VIII. The Treatment of Surgical Tuberculosis by Congestive Hyperæmia. By Dr. Zeller (Berlin). Zeller has reported twelve cases which he has treated by Bier's method. One was a case of tuberculosis of the carpal joints in a phthisical patient. The result was a brilliant one.

The case of knee tuberculosis in a phthisical man, fifty years of age, was for a short time improved, but eventually came to amputation.

Two cases of disease of the elbow-joint were only cured by partial resection and iodoform injection. The hyperæmia seemed to have made them worse.

Two knee-joints and two tarsal tuberculoses were treated with the addition of iodoform injections, and ideal results were obtained.

He presented a young maiden who showed scarcely a sign of the former disease, and who had almost a perfectly movable knee, which had cured in five months, and which for four months had had no treatment.

A seven-year-old boy, whose knee-joint had been diseased for three months, but for the past two months had been perfectly useful, was presented.